

PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON

---

A NEW SUBSPECIES OF POCKET GOPHER  
(*THOMOMYS UMBRINUS*) FROM SINALOA, MEXICO,  
WITH COMMENTS ON *T. U. SINALOAE* AND  
*T. U. EVEXUS*

By E. RAYMOND HALL AND CHARLES A. LONG

Although only one species of pocket gopher is thought to occur in Sinaloa, the geographic distribution of the species is incompletely known and it is, therefore, not surprising to find an unnamed subspecies, which may be named and described as follows:

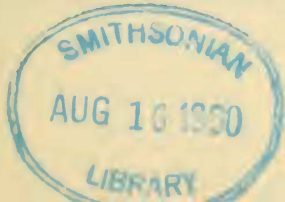
***Thomomys umbrinus varus***, new subspecies

*Type*: Male, adult, skin and skull; No. 75271, K.U.; 1 mi. S El Dorado, Sinaloa, México; 14 November 1957; obtained by William L. Cutter, original No. 1452.

*Range*: Known only from the type locality.

*Diagnosis*: Size large (see measurements); Ochraceous-Tawny (Capitalized color terms after Ridgway, "Color Standards and Color Nomenclature," Washington, D. C., 1912) but darkened with blackish below ears and in mid-dorsal area from nose to rump; tympanic bullae rugose and only slightly inflated; sagittal crest (11.7 mm long) prominent; maxillary arms of zygomata inclined posteriorly; nasals V-shaped posteriorly, flaring anteriorly but otherwise straight-sided; interpterygoid space V-shaped.

*Comparisons*: Indistinguishable in color from topotypes (for example 75264 Univ. Michigan) of *Thomomys umbrinus camoae* but larger in all measurements taken except interorbital breadth, which is the same, and lesser extension, posterior to nasals, of premaxillae. In comparison with the darker *Thomomys umbrinus sinaloae*, next north along the Pacific Coast, there is an equal or even greater disparity in size. From both *camoae* and *sinaloae*, the skull of the male of *varus* further differs as follows: tympanic bullae smaller; maxillary arm of zygoma inclined posterolaterally (less nearly at a right angle with longitudinal axis of skull); squamosal root of zygoma inclined anterolaterally (less nearly at a right angle). Differences from *Thomomys umbrinus parviceps* of higher terrain to the eastward, *Thomomys umbrinus musculus* to the southward, and *Thomomys umbrinus atrovarius* of the coastal area, also to the southward, are even greater. By weight each of those three subspecies appears to be



hardly half so large as *varus*, is Plumbeous to black instead of Ochraceous-Tawny, and has a skull that relative to the over-all length is wider across the braincase and has zygomatic arches that are widest posteriorly instead of anteriorly. Because of the larger degree of difference between *varus* and the three, small, dark subspecies (*parviceps*, *musculus*, and *atrovarius*) it is difficult to imagine intergradation between *varus* and any one of them. The uninflated tympanic bullae of *varus*, nevertheless, are seen also in *musculus* and *atrovarius*.

*Measurements of the holotype* (in millimeters): Total length 281; length of tail 101; length of hind foot 37; basilar length 41.9; length of nasals 18.0; zygomatic breadth 31.0; mastoidal breadth 23.3; breadth of rostrum 10.0; interorbital constriction 6.7; alveolar length of maxillary tooth-row 9.6; extension of premaxillae posterior to nasals 2.0; length of rostrum (middle of anterior border of nasals to lateral junction of maxilla with hamular process of lacrimal) 20.1.

*Specimen examined*: One, the holotype.

*Thomomys umbrinus sinaloae* Merriam

Three females (67609–67611 K.U.) from along the Río Fuerte, 1 mi. N, ½ mi. E San Miguel, Sinaloa, are larger, darker, and differ in other respects from *Thomomys umbrinus simulus*, the subspecies to the eastward, and more closely resemble *Thomomys umbrinus sinaloae* to the southward and *Thomomys umbrinus camoae* to the northward. Comparisons with the adult females of *camoae* from Guaymas, Sonora, and with three adult female topotypes of *sinaloae* reveal intermediacy in the ratio of the width of the nasals to the width of rostrum. The specimens closely resemble *camoae* in total length (230 mm, in *camoae* 228, and in *sinaloae* 214) and in relative shortness of tail that is 47 per cent of the length of the head and body (46 per cent in *camoae* and 51 per cent in *sinaloae*). The specimens more closely resemble *sinaloae* in broad rostrum (8.2, in *sinaloae* 8.4, and in *camoae* 7.6), long rostrum (15.7, in *sinaloae* 15.9, and in *camoae* 15.0), and coloration (darker than *camoae*). The specimens (67609–67611 K.U.) extend the known geographic range of *T. u. sinaloae* 110 miles northward along the coast from Altata, Sinaloa, the type locality of *T. u. sinaloae*. Previously the subspecies *T. u. sinaloae* was recorded only from the type locality.

*Thomomys umbrinus evexus* Nelson and Goldman

This subspecies until now has been known from only the holotype from Mount San Gabriel, 7,000–9,000 feet, state of Durango. Two males and two females (66132–66135 K.U.) from Villa Ocampo, 4,575 feet elevation, Durango, only 10 miles southeast of the mentioned type locality, agree with the holotype as originally described and differ from *T. u. sheldoni* (6 specimens from 7 mi. SW Las Adjuntas, and 6 specimens from 10 mi. SW El Salto, both localities in the state of Durango) the geographic range of which bounds that of *evexus* on the north, west and south. The black-tipped hairs of the russet-colored upper parts and the brownish

*New Subspecies of Pocket Gopher (Thomomys Umbrinus)* 37

proximal portion of the white-tipped tail of *evexus* are well shown in our specimens from Villa Ocampo.

*Acknowledgments:* Grants from the Watkins Fund of the Kansas University Endowment Association furthered the field work that yielded the specimens on which the above report was based, and a grant from the National Science Foundation furthered the study, in the Museum, of the specimens. We are grateful to W. H. Burt and E. T. Hooper of the Museum of Zoology of the University of Michigan, and S. P. Young, R. H. Manville, and Viola S. Shantz of the Biological Surveys Collections of the U. S. Fish and Wildlife Service for lending certain specimens essential for comparison.